

REMARKS

In the Office Action mailed on October 30, 2002, it was noted that claims 18-34 were pending; claims 18, 21-22, 25-29, 31, and 33-34 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Soliman (U.S. Patent No. 6,101,179) ("Soliman") in view of Willars et al. (U.S. Patent No. 5,946,630) ("Willars"); claims 19-20 and 32 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Soliman in view of Willars, and further in view of Olofsson et al. (U.S. Patent No. 6,157,627) ("Olofsson"); claim 23 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Soliman in view of Willars, and further in view of Trandai et al. (U.S. Patent No. 5,893,036) ("Trandai"); claim 24 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Soliman in view of Willars, and further in view of Langlet et al. (U.S. Patent No. 5,930,248) ("Langlet"); and claim 30 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Soliman in view of Willars, and further in view of Mallinckrodt (U.S. Patent No. 5,878,329) ("Mallinckrodt"). The foregoing rejections are respectfully traversed.

Claim 23 has been canceled and thus, claims 18-22 and 24-34 are pending in the subject application, of which claims 18, 33, and 34 are independent. Claims 18, 33, and 34 have been amended to incorporate the limitations of claim 23. Care has been exercised to avoid the introduction of new matter.

Independent Claims:

Claims 18 and 33 of the subject application (as amended herein) each recite measuring a reception power of a signal sent from the base station in a downstream direction "on a broadcast control channel."

Claim 34 of the subject application (as amended herein) recites a signal processing unit for generating the signal to be transmitted in the downstream direction "on a broadcast control channel."

Lack of Motivation to Combine the Cited References:

The Examiner has failed to set forth the required motivation to combine the references. MPEP § 2142 states that "[w]hen the motivation to combine the teachings of the references is not immediately apparent, it is the duty of the Examiner to explain why the combination of the teachings is proper." The Examiner is required to present actual evidence and make particular

findings related to the motivation to combine the teachings of the references. In re Kotzab, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000); In re Dembiczak, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999). Broad conclusory statements regarding the teaching of multiple references, standing alone, are not "evidence." Dembiczak, 50 USPQ2d at 1617. "The factual inquiry whether to combine the references must be thorough and searching." In re Lee, 61 USPQ2d 1430, 1433 (Fed. Cir. 2002) (citing McGinley v. Franklin Sports, Inc., 60 USPQ2d 1001, 1008 (Fed. Cir. 2001)). The factual inquiry must be based on objective evidence of record, and cannot be based on subjective belief and unknown authority. Id. at 1433-34. The Examiner must explain the reasons that one of ordinary skill in the art would have been motivated to select the references and to combine them to render the claimed invention obvious. In re Rouffet, 47 USPQ2d 1453, 1459 (Fed. Cir. 1998).

No Evidence Presented:

The Examiner has not presented any evidence why any of Soliman, Willars, and Trandai would have been combined. The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. MPEP § 2143.01. Specifically, there must be a suggestion or motivation in the references to make the combination or modification. Id. The Examiner does not even attempt to support such a combination, stating only that it would have been obvious "to modify the system of Soliman with the above teaching of Willars et al. in order to transfer a short message between a mobile station and service center," and that it would have been obvious "to modify the system of Soliman, Willars et al. with the above teaching of Trandai et al. in order to broadcast access information to all mobile stations in the coverage area." The Examiner cannot rely on the benefit of the combination without first supporting the motivation to make the combination. Such motivation does not appear anywhere in any of the references, and the Examiner has not presented any actual evidence in support of the same. Instead, the Examiner relies on broad conclusory statements, subjective belief, and unknown authority. Such a basis does not adequately support the combination of references; therefore, the combinations are improper and must be withdrawn.

Soliman and Trandai Teach Away From One Another:

In addition to the remarks set forth above, the combination of Soliman, Willars, and Trandai is improper because Soliman and Trandai teach away from one another. Specifically, Trandai discusses the power control of mobile stations seeking access to a cellular communication system. In the communication system discussed in Trandai, the base station controls the transmission power level of a mobile station (Trandai, col. 1, lines 10-12). The base station broadcasts a power step command on a Broadcast Control Channel (BCCH) signal that is received by compatible mobile stations in its coverage area before any access attempt is made by a mobile station (Trandai, col. 1, lines 20-23). Thus, when a portable telephone or other mobile station tries to contact the base station using a Random Access Channel (RACH) signal, it has instructions on which power step to use to initiate and maintain contact (Trandai, col. 1, lines 23-27). Then, the mobile station transmits a RACH signal at the power level corresponding to the power step broadcasted by the base station (Trandai, col. 3, lines 6-10 and 16-18).

In contrast, Soliman discusses a method for open loop power control in which the mobile station determines the power value applied for the initial access probe (Soliman, col. 4, lines 19-26). This is achieved by measuring the forward link path loss of a pilot channel, knowing the power level of the pilot channel (Soliman, col. 4, lines 34-36). The base station does not prescribe any power value for the initial access probe, it merely transmits the pilot channel (Soliman, col. 4, lines 26-28).

Clearly, Trandai and Soliman cannot be combined. Their content is contrary to each other; specifically, in Soliman, the mobile station measures, calculates, and determines an apt power value, while in Trandai, the base station prescribes and the mobile station obliges. Impermissible hindsight would be required to modify use of the broadcast channel of Trandai, applied by the base station of Trandai to command the power value to instead supply a signal that the mobile station measures and to determine the power value as in Soliman.

Dependent Claims:

Claims 19-22 and 24-32 of the subject application are allowable based on their dependency, directly or indirectly, from claim 18 (as amended herein).


Withdrawal of the foregoing rejections is respectfully requested.

There being no further objections or rejections, it is submitted that the application is in condition for allowance, which action is courteously requested. Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters. If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

Please CANCEL claim 23.

Please AMEND claims 18, 33, and 34. The remaining claims are reprinted, as a convenience to the Examiner, as they presently stand before the U.S. Patent and Trademark Office.

1-17. (CANCELED)

18. (ONCE AMENDED) A method for connection setup for mobile stations of a radio communication system having at least one base station, comprising the steps of:

recurrently offering frequency channels for a random access in an upstream direction for the mobile stations;

[with] in the mobile station that requests a connection setup, measuring a reception power of a signal sent from the base station in a downstream direction on a broadcast control channel; and

[with] in the mobile station, setting a transmission power dependent on the measured reception power for sending an access radio block to the base station.

19. (UNAMENDED) The method according to claim 18 wherein the radio communication system is configured as a TDMA/CDMA radio communication system, plurality of connections between the mobile frequency channels information of different connections can be distinguished from one another according to a connection-individual fine structure. whereby information of a are simultaneously transmitted stations and the base station in formed by time slots, whereby the information of different individual codes.

20. (UNAMENDED) The method according to claim 19 wherein the information of different connections are spread with individual codes.

21. (UNAMENDED) The method according to claim 18 wherein the mobile station sets the transmission power all the higher the lower the measured reception power is.

22. (UNAMENDED) The method according to claim 18 wherein the signal transmitted in the downstream direction is a pilot signal.
23. (CANCELED)
24. (UNAMENDED) The method according to claim 18 wherein the signal transmitted in the downstream direction is a training sequence signal.
25. (UNAMENDED) The method according to claim 18 wherein the signal transmitted in the downstream direction is a data signal.
26. (UNAMENDED) The method according to claim 18 wherein the mobile station estimates a radio field attenuation in the downstream direction on the basis of the measured reception power and sets the transmission power such that the radio field attenuation is at least partially compensated.
27. (UNAMENDED) The method according to claim 26 wherein the mobile station sets the transmission power such that the radio field attenuation is completely compensated.
28. (UNAMENDED) The method according to claim 18 wherein at least one auxiliary information is inserted into the signal sent in the downstream direction, this being employed by the mobile station for setting the transmission power.
29. (UNAMENDED) The method according to claim 28 wherein the auxiliary information is composed of an information about the transmission power used by the base station in the downstream direction.
30. (UNAMENDED) The method according to claim 18 wherein a broadband frequency range is divided into sub-ranges having a narrower bandwidth within a frequency channel for the random access, the mobile station that requests the connection setup selecting a sub-range within said frequency channel, and the mobile station sending the access radio block to the base station in this sub-range.

31. (UNAMENDED) The method according to claim 18 wherein the access radio block is not spread.

32. (UNAMENDED) The method according to claim 18 wherein the access radio block is spread with an individual code.

33. (ONCE AMENDED) A mobile station to which a connection setup is to be provided in a radio communication system having at least one base station, and wherein frequency channels are recurrently offered for a random access in an upstream direction for the mobile station, comprising:

- a measuring unit for measuring a reception power of a signal sent from the base station in a downstream direction on a broadcast control channel when the mobile station requests a connection setup;

- a transmission power setting unit which, dependent on measured reception power, sends an access radio block to the base station;

- a control panel for triggering the random access; said measuring unit comprising a signal processing unit for measuring the reception power of the signal sent in the downstream direction from the base station and for generating the access radio block; and

- said transmission power setting unit comprising a control unit for setting the transmission power for the transmission of the access radio block to the base station dependent on the measured reception power.

34. (ONCE AMENDED) A base station in a radio communication system wherein a connection setup occurs from mobile stations, and wherein the mobile station that requests a connection setup measures a reception power of a signal sent from the base station in a downstream direction, and wherein the mobile station sets a transmission power dependent on the measured reception power for sending an access radio block to the base station, comprising:

- a unit for recurrently offering frequency channels for a random access in an upstream direction for the mobile stations;

- a signal processing unit for generating the signal to be transmitted in the downstream direction on a broadcast control channel; and

a control unit for setting a transmission power for sending the signal to the mobile station that requests the connection setup.